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THE OASIS OF THE LLANO

By FLORENCE MERRIAM BAILEY

WITH ONE PHOTO

OUR first camp at the foot of the Llano Estacado after a long cold day's drive over the treeless plains was in a warm, sheltered, well-wooded amphitheater at the foot of one of the northward projections of the Llano wall known as Mesa Pajarito, whose bluff rose four hundred feet above the plain. The mesa was appropriately named as far as its amphitheater went, for, protected from the wind and warmed by the afternoon sunshine, it was ringing with the songs of "*pajaritos*", little birds—Mockingbirds and a large supporting chorus.

The trees of the amphitheater, dark solid junipers lightened by delicate green feathery mesquites, were spaced with yucca and tree cactus, one grove of which reached above our heads, and which gave the characteristic arid land touch. We looked at the rich vegetation about us with keen interest, for, lying between the bare plains over which we had come and the bare Staked Plains above us, it seemed a veritable oasis. In matter of fact it was a section of a band of vegetation that encircles part of the Llano separating the two sets of plains, a band of vegetation which owes its existence to the Llano wall. As Dr. Bigelow in his Pacific Railroad report on the botany of the region wrote—"It is to be remarked that the wind blows with tremendous force over these immense denuded plains, and this, we have reason to believe, is one great cause of the destitution of timber in this region. In confirmation of this opinion is the fact that wherever the least shelter by a bluff or rock is afforded, the modest cedar will rear its head, thankful as it were for this partial protection." The Llano wall besides cutting off the wind that has made fires sweep over the plains affords partial shade, broken soil, and more moisture from both snow and rain, thus enabling the ground at its foot to support heavier vegetation and consequently more animal life than the plains.

In the same way a canyon cutting through an arid cactus desert may have its

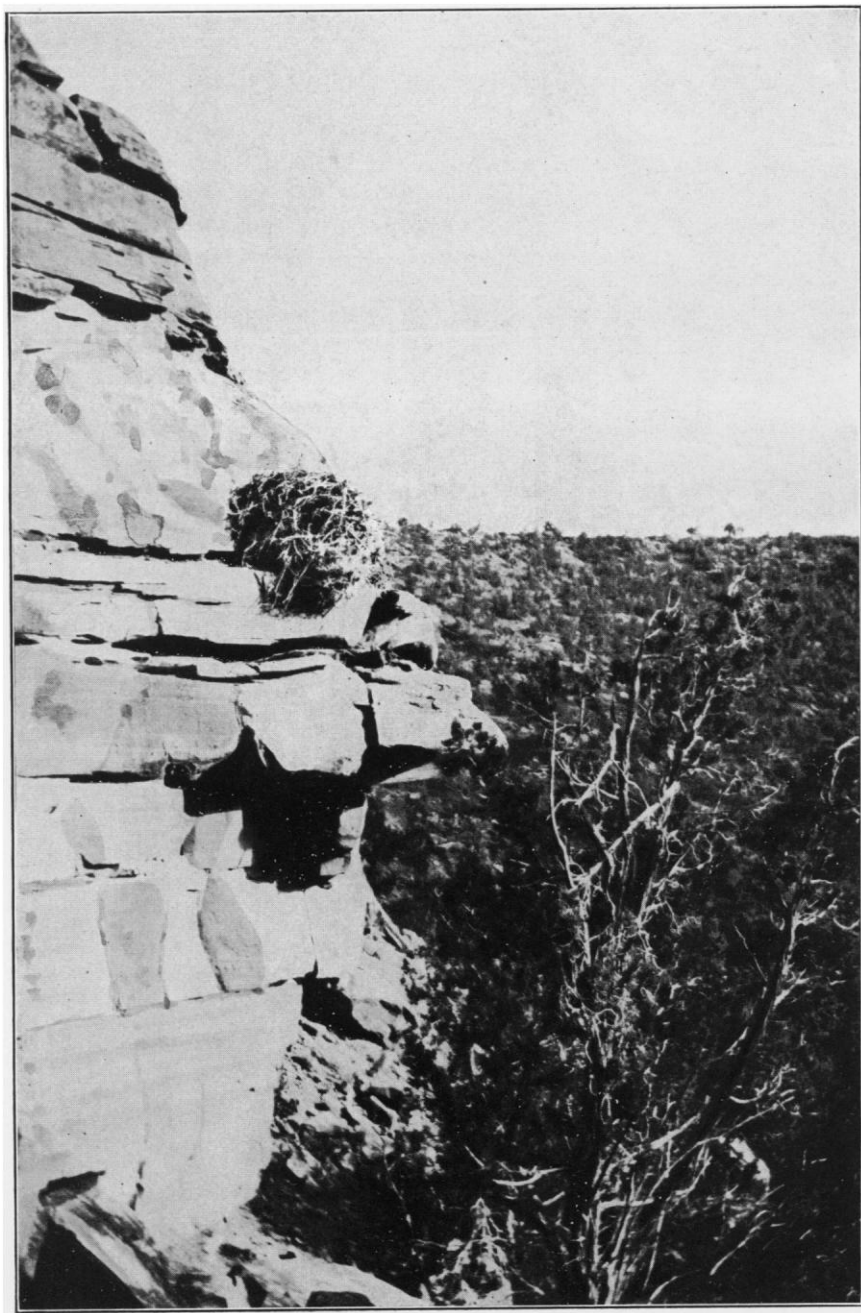


Fig. 18. AN ANCESTRAL EAGLE'S NEST ON THE LLANO WALL

bed filled with rich deciduous trees and shrubs in which live many birds and mammals unknown to the desert above. This had been the case at one of our earlier camps where cactuses so filled the spaces between junipers that it was hard to escape them, branches of *Opuntia arborescens* pricking you admonishingly on the shoulder as you passed, low white-spined prickly pear sticking needles in your boots, *engelmanni* lending spines for your leggins, and *Mammalarias* adding many a stinging touch; while cactus flowers in red, yellow, and magenta offered their glowing tribute along the way. In the canyon that cut through this cactus desert were willows, fresh green cottonwoods, trees draped in woodbine and grapevine—the grapevine adding a fragrant breath—a patch of cat-tails, clusters of brilliant yellow flowers, delicate white cliff roses and—a pair of eastern Phoebes nesting in a niche over one of the numerous water pools!

At Mesa Pajarito at the time of our visit—June 1903—Ash-throated Flycatchers, Woodhouse Jays, Vireos, and Bush-tits, characteristic birds of the juniper country or Upper Sonoran zone, were abundant; while a Roadrunner, being kept in countenance by some mesquite of the Lower Sonoran zone was seen near the top of the cliff. A young family of the delightful Desert Sparrows had just left their nest in a juniper and were being fed by their handsome black-throated parents near by, while an irrepressible brood of Rock Wrens after several alarming encounters with the strangers were led out of sight down a cut bank by their sagacious mother. Blue Crows, the young with only half-grown tails, passing in blue waves through camp were enough to give life and color to the grayest day. Confiding Mourning Doves walked about near the tents, the male showing his beautiful plum-like bloom to great advantage when he puffed out his throat in cooing to his demure brown mate.

A variety of other birds swelled the list, but most in evidence in the amphitheater were the Mockingbirds. There must have been half a dozen pairs, one of which was feeding young in a nest in a cactus close to camp, a nest well protected by its own thorny sticks as well as its thorny supporting branches. A Mocker who sang vociferously until silenced by the third day of rain, was the best mimic I ever heard—he kept me running out of the tent to see familiar birds who were not there. At dark when stentorian Mockingbirds stopped singing, doubtless because they couldn't keep awake any longer, the Poorwills with quiet voices well suited to the evening stillness began to call from the shadows, *poor-wil'-low*, *poor-wil'-low*; and when the darkness of night had silenced them, their places were taken by the Great Horned Owls which in deep-voiced, sonorous tones hooted solemnly to each other from the caverns of the rocky wall. The next day to our surprise we heard the Poor-will, the bird of dusk and dawn, calling at intervals while the sun was shining; but it was probably waked at these unseemly hours by the unaccustomed jangle of the horse bell, for after that it was heard only at its own proper concert hours.

The four hundred foot cliffs of the Llano attracted Cliff Swallows, Sparrow Hawks, Ravens, Eagles, Horned Owls, and Buzzards. Sparrow Hawks were seen from camp feeding young out of the nest, and in climbing the cliff Mr. Bailey found an old three-story eagle's nest, and also a raven's nest from which the young had recently flown. The eagle's nest, on a ledge of the sandstone cliff facing camp, was a massive structure three or four feet high, at least three nests being built one above the other. The ground beneath it told an interesting story. Numerous ejected pellets of rabbit fur, and a variety of small bones strewed the earth. The bones—jaws, skulls, and thigh bones—after critical examination were pronounced those of prairie dog, gopher, jack rabbit and cottontail—rabbit predominating.

Remains of a crawfish and a land turtle were probably attributable to a coon, while skunk tracks added their testimony as to the popularity of this eagle market. Bits of white bone had been carried away by aesthetic wood rats to decorate their nests in the junipers. The raven's nest was evidently an ancestral home, as bushels of old sticks had been thrown down on the ground. It might well have been used for generations, for it was quite inaccessible, about half way up a fifty-foot sandstone wall in a niche under a projecting rock. The old pair, Mr. Bailey reported "croaking and diving and gyrating along the face of the cliff, flying up to the top of the cliff, tilting up; closing their wings, and diving deep into the valley; then up again; then off across the face of the cliff." In another place where two Ravens were seen sailing across the face of the wall, a third, when closely watched proved only a projected shadow—like many of the supposedly dark realities of life.

The Buzzards seen flying around the wall were traced to the old carcass of a sheep. A faint trail led away from the carcass, and a coyote surprised there by the hunters burst out howling so loud that our camp man who was cutting tent pins dropped his saw and ran for his rifle. On investigation the cause of the coyote's excited outburst was explained by the discovery of a den containing young under the rocks not far away.

From Mesa Pajarito we followed along the north wall of the Llano till we came to a headland bluff rising 1000 feet from the plain, shown by the contour map to be the highest point of the Staked Plains. On camping at its foot we could hardly wait to explore the neighborhood, to see what new riches we should find in this green belt between the upper and lower brown plains; for the walls of the Llano were here six hundred feet higher than at the Pajarito amphitheater and promised a correspondingly richer flora and fauna at their base. Our first ornithological discovery had been made when driving into camp, for we were greeted by the loud notes of the Quaker-like Gray Vireo, a bird particularly interesting to find because of its restricted range in the southwest; and afterwards its cheery though jerky song was not only constantly in our ears in camp but often heard among the junipers. Another bird we were delighted to find at our door was the Scott Oriole, that rare musician with exquisite plumage of lemon and black, consistently following out a narrow strip of its native Lower Sonoran mesquite though surrounded by Upper Sonoran junipers and nut pines. A pair of the birds was doubtless nesting near us, but they were so shy they would fly on and on through the junipers when followed. The song of the male, an immature male, suggested the meadowlark's song. His favorite phrase from his rich repertoire heard from camp throughout the day was so curiously accented on the second and fifth syllables that as we went and came through the junipers with it ringing in our ears it phrased itself appropriately—a ju'-ni-per val'-ley, a ju'-ni-per val'-ley, a ju'-ni-per val'-ley.

The first night our list of neighborhood discoveries was swelled by a young family of Baird Wrens just being put to roost—how joyfully the head of the family did sing!—and a Mockingbird with a nest and three handsome blue eggs, a persistent mocker who, as my notes complain, "kept at something morning, noon, and night." Not to be forgotten were the Nighthawks, though they had been booming in the day time about our camps during the entire month since we entered the field.

The next day on a horseback trip when passing through a narrow juniper gulch we found a Black-headed Grosbeak sitting on her nest in a hackberry, an Arkansas Kingbird building in a pocket of a charred juniper stump, and best of all a Gray Vireo brooding her eggs so faithfully that she let me stroke her head on the nest—nothing remarkable for a vireo to be sure, but a heart-warming experience

nevertheless. Besides these there were the Mourning Dove, Say Phoebe, Ash-throated Flycatcher, Richardson Pewee, Woodhouse Jay, the Desert Sparrow, Gray Vireo, Gnatcatcher, and House Finch, one of whose nests was found in a tree cactus. Later, in climbing the thousand foot bluff we found a family of Mexican Falcons near the top.

With the additions these birds made to our Pajarito list and a few others noted between camps there were about forty species. Considering the fact that they were confined to a narrow strip between broad plains on which the list of birds often consisted of two, sometimes of one species, the forty seemed a goodly number. And now, thinking back over towering cliffs enlivened by moving forms and housing ancestral homesteads and of gulches and amphitheaters below ringing with joyous bird songs, this brave little band of forty peopling the juniper belt between silent plains seems to make the real oasis of the Llano.

THE BLUE-THROATED HUMMINGBIRD

By FRANK C. WILLARD

WITH FOUR PHOTOS

AS I wander about among the canyons of the Huachuca Mountains, there are two places where I always listen for a "squeak-squeak-squeak" repeated every few minutes, the second note higher pitched than the first, and the third note lower than either of the other two. These two places are in deep narrow canyons. It was some time before I was able to locate the author of the squeaks. Finally, I located a large hummingbird, perched on a dead twig well up in a fir tree.



Fig. 19. GREENHOUSE IN WHICH NEST OF BLUE-THROATED HUMMINGBIRD WAS BUILT; LOWER TIP OF NEST MAY BE SEEN WITHIN, BETWEEN CENTRAL PAIR OF SLATS, AT TOP